

<110> Mohamadzadeh, Mansour
Curiel, Tyler J.
Morris, Cindy A.

<120> Dendritic Cell Binding Proteins and
Uses Thereof

<130> D6486

<140> 10/552,153
<141> 2004-04-08

<150> PCT/US2004/10832
<151> 2003-04-08

<160> 40

<210> 1
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 1
Tyr Pro Ile Val Asn Thr Ala Val Ala Thr His Met
5 10

<210> 2
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 2
Ala Thr Phe Thr Val Gly Pro Pro Gln Leu Leu Arg
5 10

<210> 3
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 3
Phe Tyr Pro Ser Tyr His Ser Thr Pro Gln Arg Pro
5 10

<210> 4
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<222> 7
<223> peptide specific to myeloid dendritic cells;
Xaa = unknown at position 7

<400> 4
Thr Ser Ile Gly Thr His Xaa Leu Ser Ala Ala Leu
5 10

<210> 5
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 5
Thr Glu Thr Ser Trp Ser Met Phe Pro Leu His Leu
5 10

<210> 6
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 6
Ala Pro His Leu Pro Tyr Leu Arg Gly Leu Asn Leu
5 10

<210> 7
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 7
His His Asn Ser Asn His Arg Ser Phe His Tyr Leu
5 10

<210> 8
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 8
Ser Tyr Ala Asn Leu Ile Arg Ser Ile Gln Pro Gly
5 10

<210> 9
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 9
Thr Leu Val His Gln Trp Gln Pro Trp Pro Lys Ala
5 10

<210> 10
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 10
Ile Arg His Thr Thr Ser Gly Pro Pro Pro Ser Ser
5 10

<210> 11
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 11
Tyr Pro Gln Ala Leu Asn Thr Gln Pro Asp Trp Pro
5 10

<210> 12
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 12
Ala Tyr Tyr Lys Thr Ala Ser Leu Ala Pro Ala Glu
5 10

<210> 13
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 13
Ser Gln Asn Ser Leu Tyr Ser Ser Lys Pro Val Arg
5 10

<210> 14
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 14
Ser Leu Ser Leu Leu Thr Met Pro Gly Asn Ala Ser
5 10

<210> 15
<211> 12
<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide specific to myeloid dendritic cells

<400> 15

Gln Ser Gln Thr Tyr Gln Thr His Ser Val Thr Met
5 10

<210> 16

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide specific to myeloid dendritic cells

<400> 16

Glu Pro Ile His Pro Glu Thr Thr Phe Thr Asn Asn
5 10

<210> 17

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide specific to myeloid dendritic cells

<400> 17

Glu Thr Pro Met Val His Trp Pro Ser Thr Ser Pro
5 10

<210> 18

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide specific to myeloid dendritic cells

<400> 18

Ser Leu Ser Leu Leu Thr Met Pro Gly Asn Ala Ser
5 10

<210> 19

<211> 12

<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 19
Asn Trp Trp Ser Asp Trp Val Met Leu Thr Gln Ser
5 10

<210> 20
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells

<400> 20
Gln Trp Pro Gln Tyr His Tyr Leu Arg Pro Thr Leu
5 10

<210> 21
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 21
Ser Ile Thr Gln His Leu Gln Leu Lys Pro Leu Ala
5 10

<210> 22
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<222> 9
<223> peptide specific to Langerhans dendritic cells;
Xaa = unknown at position 9

<400> 22
Val Ser His Pro Leu Trp His Pro Xaa Arg Ile Leu
5 10

<210> 23
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 23
Val Ser Ser Pro Pro Arg Val Ser Gly Ile Gly Leu
5 10

<210> 24
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 24
His Pro Pro Glu Ile Tyr Ser Pro Pro Arg Tyr Pro
5 10

<210> 25
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 25
His Ser Leu Arg Leu Asp Phe Met Ala Pro Leu Thr
5 10

<210> 26
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 26

Leu Pro Pro Gly Ala Asp Leu Tyr Phe His Pro Ser
5 10

<210> 27

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide specific to Langerhans dendritic cells

<400> 27

Ile Pro Pro Leu Arg Ile Thr Glu Val Thr Pro Thr
5 10

<210> 28

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide specific to Langerhans dendritic cells

<400> 28

Ile Arg His Thr Thr Ser Gly Pro Pro Pro Ser Ser
5 10

<210> 29

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide specific to Langerhans dendritic cells

<400> 29

Val Ser Ser Pro Pro Arg Val Ser Gly Ile Gly Leu
5 10

<210> 30

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<222> 10

<223> peptide specific to Langerhans dendritic cells;
Xaa = unknown at position 10

<400> 30
Lys Ile Met Gln Ser Pro Leu Gln His Xaa Ala Pro
5 10

<210> 31
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<222> 4
<223> peptide specific to Langerhans dendritic cells;
Xaa = unknown at position 4

<400> 31
Lys Val Trp Xaa Ile Asp Trp Pro Pro Pro Ala Tyr
5 10

<210> 32
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<222> 10
<223> peptide specific to Langerhans dendritic cells;
Xaa = unknown at position 10

<400> 32
Ala Asp Arg Ser Arg Glu Leu Ala Leu Xaa Ile Phe
5 10

<210> 33
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 33
Ile Ile Pro Ser Thr Ala Asn Lys Ser Ile Ala Thr
5 10

<210> 34
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 34
Ser Asn Leu Ser Arg Thr Thr Leu Tyr Ser Gln Val
5 10

<210> 35
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 35
His Ser Leu Arg Ser Asp Trp Val Ser Pro Asn Thr
5 10

<210> 36
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 36
Ser Ser Thr Ile Asn Tyr Asn Arg Leu Asn Leu His
5 10

<210> 37
<211> 12
<212> PRT
<213> artificial sequence

<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells

<400> 37
Ser Leu His Arg Ser Ser Ser Leu Pro Ile Ser Thr
5 10

<210> 38

<211> 12

<212> PRT

<213> artificial sequence

<220>

<221> PEPTIDE

<223> peptide used as negative control

<400> 38

Glu Pro Ile His Pro Glu Thr Thr Phe Thr Asn Asn
5 10

<210> 39

<211> 95

<212> DNA

<213> artificial sequence

<220>

<223> forward primer to fusion protein of DC-
binding peptide 3 and immunodominant domains
of HER2/Neu

<400> 39

catgccatgg agaagatctt tgggagcctg gcatttctgc cggagagctt 50
tgcatggggac cctcgaggcg gaggtcgtag actgctgcag gaaac 95

<210> 40

<211> 80

<212> DNA

<213> artificial sequence

<220>

<223> reverse primer to fusion protein of DC-
binding peptide 3 and immunodominant
domains of HER2/Neu

<400> 40

gccgggtacct gggggccct ggccatgcgg gagaattcag acaccaactc 50
tccggccacccg ctaggtgtca gcggctccac 80